

ABSTRACT OF THE DISCLOSURE

The invention provides a superconducting wire rod which is filled with or interiorly includes a superconductor containing a boron, wherein the superconducting wire rod has a practical critical electric density even under a magnetic field. In a superconducting wire rod filled with or interiorly including a superconductor containing a boron, a metal powder is added to a superconducting material included in the superconducting wire rod, the metal powder is selected from at least one of an indium, a tin, a lead, an iron, a magnesium and an aluminum, the metal powder having an average grain diameter equal to or less than $20\text{ }\mu\text{m}$ is 5 to 25 vol% dispersed in the superconducting material, a density of the superconducting material included in the superconducting wire rod after a final work is equal to or more than 90% a theoretical density, and a critical current density is equal to or more than 1000 A/cm^2 .